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Amendment to the Specification

Please amend the specification as follows:

Replace paragraphs [0015] and [0016] with the following paragraphs.

-- **[0015]** Fig. 2a A complete arrangement according to the invention in one embodiment,

[0015'] Fig. 2b Illustrates a sectional view of the access opening of a closure carrier with an individual closure element properly positioned,

[0015''] Fig. 2c Illustrates a sectional, enlarged view of a positive fit connection designed as a screw connection,

[0015'''] Fig. 2d Illustrates a positive-fit connection as a snap connection with a snap ring,

[0016] Fig. 3a A closure carrier of an arrangement according to the invention, according to Fig. 2a,

[0016'] Fig. 3b Illustrates an enlarged view of a corresponding closure of Fig. 3a for use in a bayonet-type connection, --

Replace paragraphs [0023] to [0043] with the following paragraphs :

[0023] Fig. 2a-2d shows that, with the arrangements according to the invention, an individual closure element 3 is allocated to each reaction vessel 2. Fig. 4 shows such an individual closure element 3 in a side view. It can be seen that the individual closure element 3 features a closure section 4 to provide a tight seal for the aperture of the reaction vessel 2, as well as an actuating ~~actuation~~ section 5 for engaging at the individual closure element 3 for the purpose of handling. Fig. 2b specifically illustrates an access opening of the closure carrier with the individual closure element in position, the positive fit connection being of the bayonet-type connection. That is, the socket 7 of the closure carrier 6 with bayonet-parts 9 (shown in broken line) are shown assembled with the individual closure element 3 and bayonet-counterparts 8 (shown in broken line). Note that in Fig. 2b, the actuating section 5 and closure

section 4 includes a camber 4a and the closure handling device 5a (shown in broken line) on the interior of the individual closure element 3 corresponds to the positive-fit closure element 12 of actuating tool 11 in Fig. 6.

[0024] Fig. 2c and 2d show positive-fit connections designed as a screw connection or snap-fit connection. Specifically, Fig. 2d shows the snap-fit connection including a snap ring 8 on the actuating section 5 of the individual closure element 3 and the counter-ring 9 on the socket 7 of the closure carrier 6

[0025] Figs. 2a-2d and 3a-3b further show closure carriers 6 covering all the reaction vessels 2 of the microtitre plate 1, each with a socket 7 for the individual activation section 5 of each individual closure element 3, for securing the individual closure element 3 to the closure carrier 6. The closure carrier 6 can also cover only one group of reaction vessels 2, so that the overall arrangement then features several closure carriers 6.

[0026] The individual closure elements 3 secured to the closure carrier 6, as shown in Fig. 2a, are capable of being set jointly with the closure carrier 6 onto the reaction vessels 2, i.e. the microtitre plate 1, so as to form a seal, but can also be drawn off these again jointly with the closure carrier 6.

[0027] Figs. 2a-2d, 3a-3b, and 4 in conjunction now allow it to be seen that provision is made, with the teaching of the invention, for the closure sections 4 of the individual closure elements 3 to be capable of being inserted through the socket 7 in the closure carrier 6, i.e. they do not collide with the closure carrier 6 at insertion and removal from the closure carrier 6. With the actuating ~~actuation~~ sections 5, the individual closure elements 3 are further secured to the closure carrier 6 in such a way that, with the closure carrier 6 placed on the reaction vessels 2, together with the individual closure elements 3, each individual closure element 3 is also capable of being removed individually from the closure carrier 6 and from the reaction vessel 2 allocated to it. In other words, according to the invention the closure carrier 6 is an independent "cover carrier", on which the individual closure elements 3 are located in

a detachable manner such that they can be individually removed even with the closure carrier 6 being located on the reaction vessels 2. This allows for the individual opening of each reaction vessel 2 with the other reaction vessels 2 remaining closed. This has the advantages described in the general section of the Description, and, in particular, avoids any cross-contamination.

[0028] There are of course a variety of possibilities for securing the individual closure elements 3 to the closure carrier 6 within the framework of the teaching. The embodiment shown and to this extent preferred shows, in this context, that the individual closure elements 3 are secured to the closure carrier 6 by means of a releasable positive-fit connection 8, 9, between the actuating ~~actuation~~ section 5 and the socket 7. This can be appreciated particularly well in a joint survey of Figs. 2a-2d, 3a-3b, and 4. The lateral dimensions of the socket 7 and the securing section 5 of the individual closure element 3 are selected, in the embodiment shown and preferred, in such a way, and the positive-fit connection 8, 9, is designed in such a way, that, with the individual closure element 3 placed in the socket 7, they allow for a slight lateral displacement of the individual closure element 3 in the socket 7. This slight translatory displacement possibility allows for a precise positioning of the closure sections 4 of all the individual closure elements 3 in the individual reaction vessels 2. This applies in particular if, when the closure carrier 6 provided with the individual closure elements 3, closes the reaction vessels 2 progressively row by row. The slight relative displacement permitted between the closure carrier 6 and the individual closure element 3 particularly facilitates this process if a relatively rigid plastic material is used for the closure carrier 6.

[0029] In Figs. 2a-2d, 3a-3b, and 4, it can be seen for the positive-fit connection 8, 9, specifically that these are designed in bayonet fashion, whereby the tenon section 8 of the positive-fit connection 8, 9 is arranged at the individual closure element 3, while the link section 9 of the positive-fit connection 8, 9, forms the socket 7 of the closure carrier 6. The link sections 9 can be identified as edges of the sockets 7 in the

closure carrier 6 in Fig. 3b. It can be appreciated how the tenon sections 8 at the actuating ~~actuation~~ section 5 of the individual closure element 3 in Fig. 4 run in bayonet fashion into the corresponding link sections 9 at the socket 7 pertaining to them. In one rotational position, therefore, the positive-fit connection 8, 9, is closed in the embodiment shown, in a rotational position offset by 45° the positive-fit connection 8, 9, is opened, and the individual closure element 3 can be withdrawn upwards from the socket 7 in the closure carrier 6. In the present case, four tenon parts 8 are provided for at one actuating ~~actuation~~ section 5, but it is of course also possible to work with another number. The number of tenon parts 8 and link parts 9 determines the angle of rotation required to effect release or closure.

[0030] A normal bayonet closure reaches its closed position by way of a rotational movement in one direction and its opening position by a rotational movement in the opposite direction. Such a bayonet closure can also be used according to the invention for the positive-fit connection 8, 9. The preferred embodiment shows a design, however, in which the bayonet closure is capable of actuation in both directions of rotation, and does not feature a stop but a latch arrangement 8a which can be overcome. The latch arrangement 8a can be identified at each tenon part 8 in Fig. 5. With this design, the operator is at liberty with regard to which direction of rotation he wishes to actuate the bayonet closure; the other function position of the bayonet closure is always reached in each case.

[0031] As an alternative, a quick screw connection, such as a quadrant screw connection, can also be considered as the positive-fit connection 8, 9, as well as a type of snap connection.

[0032] In principle it is also possible for the individual closure elements 3 to be secured to the closure carrier 6 by means of a non-positive connection. The non-positive closure of such a connection should then be of such a size, however, that the closure carrier 6 with all the individual closure elements 3 can be placed without further ado onto the reaction vessels 2 such as to form a seal, and can be withdrawn

from them again. Because these force relationships are difficult to match correctly, as is already known from the known silicone mats as collective closure elements (WO 99/44.747), in practice it is the positive-fit connections 8, 9, applied in the embodiment, which will be selected.

[0033] Fig. 2a indicates and Fig. 5 shows more clearly, with the individual closure element 3 also, that the individual closure element 3, in particular and shown here at the actuating ~~actuation~~ section 5, features a closure element handling device 10 for engaging an actuating tool 11, which serves to handle an individual closure element 3. In the embodiment shown, the actuating tool 11 is indicated as a rod-shaped manual tool. Use is also made, however, for more extensive handling operations, of automatically-moved and actuated actuation tools 11, as is known from the prior art.

[0034] In the embodiment shown, provision is made for the closure element handling device 10 to be designed as a positive-fit closure element, to which a corresponding positive-fit closure element 12 on the actuating tool 11 corresponds. Put more precisely, in the embodiment shown the closure element handling device 10 is designed as a component, namely in this case as a link element, of a bayonet connection. The positive-fit element 12 at the actuation tool 11 is designed as the other part, in particular the tenon part, of the bayonet closure element.

[0035] For the design of the closure handling device 10 and the corresponding positive-fit closure element 12, the embodiment represented shows a conventional traditional bayonet closure design. Provisions should accordingly be made, to the purpose, such that after the establishment of the bayonet closure engagement a rotation of the individual closure element 3, inserted in the socket 7, is effectively possible in both directions, so that the right-left insensitivity of the positive-fit connection 8, 9, achieved according to the invention with the preferred embodiment, can also be exploited.

[0036] For the handling of the individual closure elements 3, likewise, the other options also apply, whether in positive-fit design or in non-positive format, as have already been explained.

[0037] The embodiment shown and preferred shows in particular in Figs. 4 and 5 that at the individual closure element 3 the positive-fit connection 8, 9, or the non-positive fit connection is arranged on the outside at the actuating ~~actuation~~ section 5, while the closure element handling device 10 of the individual handling element 3 is arranged on the inside. This corresponds to the arrangement identifiable in Figs. 2a-2d and Fig. 3a-3b of the individual closure elements 3 in embedding in the sockets 7 in the closure carrier 6.

[0038] With regard to the interaction of the closure section 4 of an individual closure element 3 with the open end of the reaction vessel 2 pertaining to it, it is possible, as with the prior art, for provision to be made for the closure section 4 of the individual closure element 3 to overlap the reaction vessel 2. The embodiment shown and preferred shows, however, a design which is characterised in that the closure section 4 of the individual closure element 3 enters into the open end of the reaction vessel 2 in the manner of a plug. This too is inherently known from the prior art. This allows for a particularly purposeful conception to be achieved, realised in this embodiment, that the securing sections 5 of the individual closure elements 3 consist of a relatively hard and rigid plastic material, the closure sections 4 are formed to provide a material fit, and consist of a relatively soft rubber-elastic plastic material. Fig. 4 shows this indicated by the distinct grey shading of the two sections 4, 5. This enables an optimum sealing effect to be achieved in the closure section 4, and at the same time guarantees simple handling capability to the purpose of the individual closure elements 3 in connection with the closure carrier 6. The latter is also intended to consist of a relatively hard and rigid plastic material, in order for the closure carrier 6 to be handled satisfactorily as a whole, and in particular to allow for easy connection with the microtitre plate 1 and its reaction vessels 2.

[0039] Not represented in the drawing is a design which allows for the easy dripping of condensation from the underside of the closure section 4 in that this is designed with a camber in a downwards direction.

[0040] It has been explained in relation to the prior art that individual closure elements 3 are also known which feature a thin membrane, through which the interior of the individual reaction vessels can be reached with a needle. The represented and preferred embodiment shows a design such as this, namely a design in which the closure section 4 features a membrane section 4a capable of being perforated. This can be achieved by means of a central passage point 5a in the securing section 5. Both are shown in Fig. 5. The design of the closure section 4, in a relatively soft rubber-elastic plastic material, in particular a thermoplastic elastomer, offers the possibility, to the purpose, that a penetration hole in the membrane section 4a of the closure section 4 will close again of its own accord, because the thermoplastic elastomer has sufficient resetting force.

[0041] It is of course possible, when selecting different materials, to make these of different colours, or to have the individual closure devices 3 coloured differently to the closure carrier 6. It is of course also possible for the individual closure elements 3 to have colours which differ from one another, for example in this way to combine information relating to the contents of the individual reaction vessels 2. The latter is indicated in Fig. 2a by the different grey shades of the two individual closure elements 3 which can be identified therein.

[0042] Fig. 6 finally shows in an enlarged representation the actuation tool 11, with the positive-fit closure element 12 located in it and, if appropriate, a spring-loaded pressure tenon 13, which provides the fixing of the bayonet closure element to the closure handling device 10 of the individual closure element 3. Many other designs are of course also conceivable for corresponding actuation tools 11. Provision can also be made for the spring force for fixing the bayonet closure element to be provided by the inherent elasticity of the closure section 4. In the embodiment shown,

for this purpose the pressure tenon 13 is located in the passage point 5a immediately on the material of the closure section 4, so that this additional function is provided.

[0043] Fig. 3a-3b show ~~shows~~ the closure carrier 6 of the ~~an~~ arrangements according to the invention, Fig. 2a-2d show ~~shows~~ the closure carrier 6 fitted with individual closure elements 3. Such closure carriers are also inherently commercially viable elements, which are therefore subject to individual protection. The same applies accordingly to the individual closure elements 3.

[0043']Fig. 7 shows in diagrammatic form an example of a storage and dispensing arrangement 14 for individual closure elements 3 of the type under discussion. This is equipped with its own positive-fit arrangement 15, which interacts with the positive-fit arrangement of the individual closure element 3, namely the tenon parts 8 on the actuating ~~securing~~ section 5, in such a way that the individual closure elements 3 can be issued in precisely predetermined and specific lateral orientation from the storage and dispensing arrangement 14. It is thus possible for the fitting either of the closure carrier 6 with the individual closure elements 3 to be effected, or also for the direct fitting of the reaction vessels 2 without the closure carrier 6. --